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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/003,056	11/02/2001	Richard M. Miller-Smith	GB 000154	4898	
24737	7590 03/03/2004	EXAMINER			
PHILIPS II	NTELLECTUAL PROP	KOVALICK, VINCENT E			
P.O. BOX 3	001				
BRIARCLII	FF MANOR, NY 10510	ART UNIT	PAPER NUMBER		
			2673	8	
			DATE MAILED: 03/03/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/003,056	MILLER-SMITH, RICHARD M.				
. Office Action Summary	Examiner	Art Unit				
	Vincent E Kovalick	2673				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). Status	136(a). In no event, however, may a reply be tirely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed rs will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 18 E	December 2003.					
2a)⊠ This action is FINAL . 2b)☐ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application Papers	'					
9) The specification is objected to by the Examine	or .					
10) The drawing(s) filed on is/are: a) acc		Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ction is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. a) The translation of the foreign language provisional application has been received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. 						
Attachment(s)	-					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)				

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Applicant's Amendment dated December 18, 2003 in response to USPTO Office Action dated September 15, 2003.

The addition of new claims 12-20 have been entered in the record and are considered in the Office Action hereinbelow.

Applicant's arguments filed December 18, 2003 have been fully considered but they are not persuasive.

Regarding Applicant's argument regarding claim 1, Cheng teaches all the icons being arranged in a circular (loop) path along which a screen cursor (selector) is movable under the control of a flywheel (col. 2, lines 49-51). Sommers et al. teaches the rotation, in either a clockwise or counterclockwise direction, of the icon loop on the system display (col. 3, lines 57-67 and col. 4, lines 1-4).

Regading Applicant's argument regarding claims 2 and 7-8, Satloff teaches a joystick force sensing resistor-based pointing device (col. 7, lines 29-31).

Relative to Applicant's argument regarding claim 4, that there is no suggestion with the reference of Matzke to control a loop display.

In response to applicant's argument regarding claim 4, that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the

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knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Claim 4 teaches "the control device is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the hand position on the pressure pad at which pressure is applied. Matzke et al. teaches this feature (col. 3, lines 40-47 and col. 4, lines 13-24 and 46-50 and Fig. 1).

In response to applicant's argument, relative to claims 9-11, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 3, 5-6, 12, 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (USP 5,986,638 taken with Sommers et al. (USP 5,940,076).

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Relative to claims 1 and 12, Cheng teaches an apparatus and method for synchronously selecting icons in flywheel controlled color computer monitor (col. 12, lines 40-49 and Fig. 2); Cheng further teaches an image control system for controlling a menu on a display comprising: a menu for a display, the menu being arranged as a plurality of simultaneously displayed menu items in a loop (col. 2, lines 3-11, 36-39 and Fig. 2); a selector to select an item from the menu, the selector being moveable with respect to the loop (col. 2, lines 48-51); and a user input device (flywheel) for inputting an instruction from a user for selecting said menu items from the menu wherein the user input device comprises a control device (flywheel) to generate a control signal to move the selector, the control device having a loop configuration, wherein movement around the loop configuration of the control device causes a corresponding relative movement between the selector around the loop of menu icons (col. 2, lines 26-31, 48-67 and col. 3, lines 1-11). Cheng does not teach said loop being moveable with respect to the selector. Cheng teaches an apparatus and method for synchronously selecting icons from a loop format display using a flywheel to input commands to move the courser through the selection process. Sommers et al. teaches a graphical user interface for an electronic device and method therefor

display using a flywheel to input commands to move the courser through the selection process. Sommers et al. **teaches** a graphical user interface for an electronic device and method therefor (col. 1, lines 57-67; col. 2, lines 1-12 and Fig. 4); Sommers et al. further **teaches** the loop (wheel) being moveable (col. 3, lines 57-67; col. 4, lines 1-4 and Fig. 4), further still, Sommers et al. **teaches** a user input device comprising a control device (Fig. 3, item 302) to generate a control signal to move the loop and the selector relative to each other (col. 4, lines 36-46). It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Cheng the feature as taught by Sommers in order provide the feature of rotating the loop simultaneously with the selector in order to expand the number of

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applications that may be selected, and provide the means to select between rotating the selector or rotating the menu loop or both simultaneously, which ever expedites the menu selection process.

Regarding claims 3 and 14, Cheng further **teaches** said image control system wherein the control device is a rotary control, rotatable through 360 degrees to generate the control signal in dependence on the angular position of the control device about the loop configuration (col.2, lines 47-57).

Relative to claims 5 and 16, Sommers et al. further **teaches** said image control system wherein the menu is arranged in a substantially circular form and wherein change in the control signal causes rotation of the circle with respect to a predetermined point of rotation (col. 3, lines 57-67; col. 4 lines 1-4 and Fig. 4).

As to claims 6 and 17, Cheng **teaches** the menu arranged in a carousel arrangement (col. 2, lines 36-39 and Fig. 2); and Sommers et al. **teaches** the menu arranged in a carousel arrangement and displayed in three dimensions on the display (as seen in Figs. 4 and 5).

4. Claims 2, 7-8, 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng taken with Sommers et al. as claims 2 and 7-8 are applied to claim1 1 and claims 13 and 18 are applied to claim 12 respectively in item 3 hereinabove, and further in view of Satloff (USP 5,667,319).

Relative to claims 2,7-8, 13 and 18, Cheng taken with Sommers et al. **does not teach** said image control system wherein the user input devices comprises at least one force-sensing resistor to receive a force from a user and generate the control signal in dependence on this; or wherein the user input device is a joystick.

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Cheng taken with Sommers et al. **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

Satloff **teaches** a simplified computer keyboard (col. 3, lines 9-67 and col. 4, lines 1-67);

Satloff further **teaches** said image control system wherein the user input devices comprises at least one force-sensing resistor to receive a force from a user and generate the control signal in dependence on this; and wherein the user input device is a joystick (col. 7, lines 29-36).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Cheng taken with Sommers et al. the feature as taught by Satloff in order to simplify the keyboard by providing alternate input and control devices that would be accommodating to children and handicapped user (Satloff, col. 1, lines 12-19).

5. Claims 4, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng taken with Sommers et al. as applied to claims 1 and 12 respectively in item 3 hereinabove, and further in view of Matzke et al. (USP 4,736,191).

Regarding claims 4 and 15, Cheng taken with Sommers et al. **does not teach** said image control system wherein the control devices is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which pressure is applied.

Cheng taken with Sommers et al. **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

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Matzke et al. **teaches** a touch activated control method and apparatus (col. 2, lines 12-67; col. 3, lines 1-58 and Fig. 1 item 24); Matzke et al. further **teaches** said image control system wherein the control devices is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which pressure is applied (col. 3, lines 40-47; col. 4, lines 13-24 and col. 11, lines 49-52).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Cheng taken with Sommers et al. the feature as taught by Matzke et al. in order to facilitate controlling the motion of a cursor on a display screen by finger touch positioning on a pressure sensitive touch pad, said touch pad being conveniently mounted on a keyboard (Matzke et al., col. 2, lines 12-17).

Regarding claim 20, Matzke et al. **does not specifically teach** the continuous circular movement upon the annular control device causes the corresponding relative movement between the selector and the loop of the menu in a series of discrete steps, this action being in common practice in the manipulation of a cursor on a display device.

Because said action is in common practice and well known in the art, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include said feature in the device as taught by Cheng taken with Sommers in order to facilitate the continuous circular movement of the cursor relative to the said icon loop display.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng taken with Sommers et al. as applied to claim 1 in item 3 hereinabove, and further in view of Clapper (USP 6,501,516).

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As to claim 9, Cheng taken with Sommers et al. **does not teach** said image control system in which the display is a television screen and the user input device is a television remote control. Cheng taken with Sommers et al. **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

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Clapper **teaches** a remotely controlling video display devices (col. 1, lines 7-41); Clapper further **teaches** said image control system in which the display is a television screen and the user input device is a television remote control (col. 2, lines 16-18 and Fig. 1).

It would have bee obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Cheng taken with Sommers the feature as taught by Clapper in order to provide the convenience of being able to manipulate the selection of menu items etc. displayed on the TV screen from a remote distance (Clapper, col. 1, lines 10-15).

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng taken with Sommers et al. as applied to claim 1 in item 3 hereinabove, and further in view of Kim (USP 5,736,703).

Relative to claim 10, Cheng taken with Sommers et al. **does not teach** a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the input device is a rotary control positioned on the front face of the mobile telephone handset.

Cheng taken with Sommers et al. **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

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Kim **teaches** a variable speed select key for a mobile communication device enabling step or speed scrolling of device functions to facilitate function selection (col. 1, lines 36-67 and col. 2, lines 1-53); Kim further **teaches** a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the input device is a rotary control positioned on the front face of the mobile telephone handset (col. 1, lines 18-26).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Cheng taken with Sommers et al. the feature as taught by Kim in order to provide a variable speed function selection means for a mobile phone that enables varying speed selection of device functions with single hand operation.

8. Claims 11 and 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng taken with Sommers et al. as applied to claims 1 and 12 respectively in item 3 hereinabove, and further in view of Bae (USP 6,405,061).

As to claims 11 and 19, Cheng taken with Sommers et al. **does not teach** a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the control device is an annular pressure pad to receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which the pressure is applied.

Cheng taken with Sommers et al. **teaches** a loop of menu images displayed for selection wherein the menu loop can be rotated via a rotatable input device and wherein the image selector (cursor) can also be rotated around the image loop to designate the menu to be selected.

Bae teaches a mobile telephone handset having a control system in which the display is the mobile telephone handset display screen and the control device is an annular pressure pad to

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receive pressure from a user and generate the control signal corresponding to the angular position on the pressure pad at which the pressure is applied (col. 2, lines 17-28 and Fig. 1).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Cheng taken with Sommers et al. the feature as taught by Bea in order to provide finger tip data entry control of a cursor on a display portion of a mobile telephone (Bea, col. 1, lines 11-17).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No.	6,411,307	Rosin et al.
U. S. Patent No.	6,411,275	Hedberg
U. S. Patent No.	6,208,335	Gordon et al.
U. S. Patent No.	6,058,319	Sadler
U. S. Patent No.	5,627,531	Posso et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Responses

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E Kovalick whose telephone number is 703 306-3020. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703 305-4938. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306-0377.

Vincent E. Kovalick

February 27, 2004

BIPIN SHALWALA
CUPETWISORY PATENT EXAMINER
TECHNOLOGY CERTEL 2600